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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/724,365

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Mitsuaki Osame

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EXAMINER

NGUYEN, LONG T

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

NC EX

Office Action Summary

Application No.

10/724,365

Applicant(s)

OSAME ET AL.

Examiner

Long Nguyen

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7, 8, 11, 12, 43, 44, 53 and 54 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 14, 15, 20, 21, 24, 25, 30, 31, 37, 38, 47 and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/27/04 + 11/22/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims withdrawn from consideration are 3-6,9,10,13,16-19,22,23,26-29,32-36,39-42,45,46,49-52,55 and 56.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Specie D (Figure 7, note that applicant recites that claims 1, 2, 7, 8, 11, 12, 14, 15, 20, 21, 24, 25, 30, 31, 37, 38, 43, 44, 47, 48, 53 and 54 are readable on the elected Figure 7) in the reply filed on 3/2/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Information Disclosure Statement

2. The information disclosure statement filed 7/27/04 and 11/22/05 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Note that there is no copy for design. ID "AQ" and "AR".

Drawings

3. The drawings are objected to because Figure 2(A-B) should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: on page 18, line 26, it appears that "data latch circuit 5004" (both occurrences) should be changed to --data latch circuit 5003-- (see line 15 of page 18 that reference "5003" is for the data latch circuit).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 14, 15, 20, 21, 24, 25, 30 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 14, the recitation "a sampling pulse from a shift register of the preceding stage" on line 2 and "a sampling pulse from a shift register of the present stage" on line 3 cause the claim to be indefinite because "the preceding stage" and "the present stage" lack clear antecedent basis, and it is not clear "the preceding stage" and "the present stage" of which circuit. Further, "a sampling pulse" and "a shift register" on line 3 are indefinite because they are unclear whether they are the same as "a sampling pulse" and "a shift register" recited earlier on line 2.

Claims 15, 20 and 21 are indefinite the similar reasons as discussed in claim 14.

With respect to claim 24, “the width of a power supply voltage” on line 2 is indefinite because it is not understood what exactly applicant means because it is known that a power supply voltage does not have a width. Clarification and/or appropriate correction is requested.

Claims 25, 30 and 31 are indefinite the similar reasons as discussed in claim 24.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1, 2, 14, 15, 24, 25, 37, 38, 47 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Tam (USP 6,628,146).

With respect to claims 1, 24, 37 and 47, Figure 3 of Tam discloses a data latch circuit for sampling a digital signal (Vin2), which includes: a capacitor means (C2) having first and second electrodes (right electrode and left electrode of C2); an inverter (Q1, Q11); a switch (Q6) wherein the switch (Q6) is turned on and a first potential is input to the second electrode of the capacitor means (when Q6 is turned on, so Q8 is also on to connected the second electrode of C2 to ground) during a reset period; and the digital signal (Vin2) is input to the second electrode of the capacitor means (C2) during a sampling period (Q6 is off, and Q10 is ON) after the reset period. Note that the circuit in Figure 3 of Tam uses thin-film transistors and are used in display device (see lines 47 to line 60 of Col. 5, and lines 30-42 of Col. 7). Also note that Figure4 shows

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the amplitude of the input Vin2 about 1V which is smaller than the power voltage (5V, see Figure 3) used for the data latch circuit.

With respect to claims 2, 25, 38 and 48, Figure 6 of Tam discloses a data latch circuit for sampling a digital signal (Vin2), which includes: a capacitor means (C2) having first and second electrodes (right electrode and left electrode of C2); an inverter (Q1, Q11); a first switch (Q6); a second switch (Q10); and a third switch (Q8); wherein the first switch (SW3) and the second switch (Q10) are turned to input a first potential to the second electrode of the capacitor means (Q6 and Q8 are on to connected the second electrode of C2 to ground) during a reset period; and the digital signal (Vin2) is input to the second electrode of the capacitor means (C2) during a sampling period (Q6 and Q8 are off, and Q2 is ON) after the reset period. Note that the circuit in Figure 3 of Tam uses thin-film transistors and are used in display device (see lines 47 to line 60 of Col. 5, and lines 30-42 of Col. 7). Also note that Figure 4 shows the amplitude of the input Vin2 about 1V which is smaller than the power voltage (5V, see Figure 3) used for the data latch circuit.

Insofar as understood of claims 14 and 15, it is seen that the reset period is controlled by a first signal (RST1) which controlling the switches Q6 and Q8, and the sampling period is controlled by a second signal (GO1) which controlling the switch Q10. Note that the "sampling pulse from a shift register" is not part of the structure of the data latch circuit, so the recitation "from a shift register" is just and intended used, and it is seen in the operation of the Tam circuitry that the signals RST1 and GO1 are capable of receiving signals (pulses) from any source including from a shift register, so the reset period and the sampling period are determined

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by sampling pulses from the shift register of different stages (because the reset period and the sampling period are not existed at the same time period).

Allowable Subject Matter

9. Claims 7, 8, 11, 12, 43, 44, 53 and 54 are presently allowed. Note that claims 20, 21, 30 and 31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action because they depend on allowable claim 7 or claim 8.

Conclusion

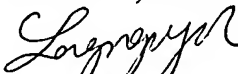
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directly to Examiner Long Nguyen whose telephone number is (571) 272-1753. The Examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Callahan, can be reached at (571) 272-1740. The fax number for this group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 24, 2005


LONG NGUYEN
PRIMARY EXAMINER